

- **LYMPHOCYTE:**
 - Same to RBC in size
 - Non-motile and Non-Phagocytic
 - Secretes antibodies to destroy microbes and their toxins, reject grafts and kill tumour cells
 - Helps in healing of injuries
 - B-Lymphocyte, T-Lymphocyte
- **GRANULOCYTES:** Cytoplasm is granular, Nucleus is lobed. Also called granular Leucocyte. Formation in Red Bone Marrow (**GRANULOPOIESIS**)
- **BASOPHIL:**
 - Takes basic stain such as Methylene Blue
 - Nucleus is S-shaped
 - Release Histamine and Heparin by exocytosis in blood
- **EOSINOPHIL:**
 - Takes acidic stain such as Eosin
 - Nucleus is bi-lobed
 - Shows antihistamine properties (number increases in allergic condition)
 - Also helps in dissolving blood clot
- **NEUTROPHIL:**
 - Takes both acidic and basic stain equally
 - Nucleus is may lobed
 - Shows phagocytic action. Engulf microbes.

Platelet: also called **THROMBOCYTE**

- Haemoglobin Absent
- Shape Round, oval, disc-like but quickly become stellate in blood
- Size Smallest part of Blood
- Number Fewer than RBC
More than WBC
250000 platelets in a cubic millimetre
- Colour Colourless
- Nucleus Absent
- Formation in Red Bone marrow and called

THROMBOPOESIS

It is fragment of large cells in the bone marrow rather than true cells

- Life Span 3 – 7 days
- At the site of injury, it releases **THROMBOPLASTIN** that helps in blood clotting

Blood Groups: (ABO and Rh Blood Group System)

- ISBT = International Society of Blood Transfusion
- Total 36 human blood group are recognised by ISBT
- Of these the most common are two – ABO and Rh Blood Group System for suitability in blood transfusion
- **Discovered by Karl Landsteiner (1900)**
- Classified on the basis of presence of Antigens (Antigen A and Antigen B) on RBC and absence of Antibody (Antibody A and Antibody B) in serum of human